

DEFENSE INFORMATION INFRASTRUCTURE (DII)

COMMON OPERATING ENVIRONMENT (COE)

DII COE Version Description Document for Consolidated DCE Application Development Tools v1.0.0.0 (Solaris 2.4) Version Description Document 12/20/96

Distribution limited to Defense Information Infrastructure (DII) Common Operating Environment (COE) Standard System Installations and those specified in specific international agreements. Other requests from this document must be referred to this document must be referred to the Program Manager, DII, 45335 Vintage Park Plaza, Sterling, Virginia 20165-6701.

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Appendix A Software Changes

Part 1: VDD for DII COE DCE 1.1 application Development Tools Version 1.0.0.5 (Solaris 2.4)

1. System Overview

The DCE 1.1 Application Development Tools consists of COTS compilers, library, and header files that allow developers to define and manage a set of programs intended to run in a DCE environment. The development tools support and establish the following methods:

- defining an interface between the component parts
- installing and registering a server so that clients can use it
- set up clients so they can use servers

The DCE 1.1 Application Development Tools are required to develop software which uses DCE resources. Only those systems which have been identified as developers' workstations require the development tools. DCE developers can take advantage of simplified communication between software modules running on different systems. Security can be built into an application which provides a reliable way of determining if a user should be allowed to perform certain functions. The development tools provides the resources that support portability and interoperability with capabilities that hide differences among the various hardware/software platforms.

This delivery consists of COTS software. The COTS software is a licensed product from Transarc called the DCE Application Development Tools.

Updated Tools for the DCE Application Development Tools

Information regarding updates to the development tools are identified in the Release Notes. The Release Notes are maintained and distributed by Transarc when a license is purchased. Once a license is purchased updated Release Notes can be obtained from Transarc's web site, www.transarc.com.

2. Referenced Documents

The following documents are referenced in this Version Description Document:

- OSFâ DCE Application Development Guide - Introduction and Style Guide
- OSFâ DCE Application Development Guide - Core Components
- OSFâ DCE Application Development Reference Volume 1
- OSFâ DCE Application Development Reference Volume 2

3. Version Description

3.1 Inventory of Materials Released

- Magnetic Media: Two 8mm tapes consisting of relative tar of the Consolidated DCE Application Development Tools, Version 1.0.0.0/Solaris 2.4
 - Transarc DCE 1.1 Application Development Tools v1.0.0.5
 - Simplified DCE APIs v 1.0.1.0
- Version Description Document Defense Information Infrastructure (DII) Common Operating Environment (COE) *Consolidated Application Development Tools Version 1.0.0.0*, December 20, 1996.
- *Installation Instructions for the Consolidated DCE Application Development Tools* (Solaris) Version 1.0.0.0, December 20, 1996

3.2 Software Changes

Reference Appendix A for a list of the DCE API software changes.

4. Installation Instructions

Reference the *Installation Instructions for the Consolidated DCE Application Development Tools for Solaris 2.4* for instructions on installing the DCE Application Development Tool environment.

5. Known Problems and Errors

There are currently no existing unresolved problems.

6. Release Notes

Information regarding updates to the development tools are identified in the Release Notes. The Release Notes are maintained and distributed by Transarc when a license is purchased. Once a license is purchased updated Release Notes can be obtained from Transarc's web site, www.transarc.com.

Part 2: VDD for DII COE DCE APIs Version 1.0.1.0 (Solaris)

1. System Overview

The DCE API's are a suite of header files that allow developers to define and manage a set of programs intended to run in a DCE environment. The API's make the DCECOE application development more manageable, configurable and understandable. The DCE API's consists of meta operations, configuration options, and structure.

Developing a DCE application usually requires many similar steps to support the client and server. The API's reduces these redundant steps into integrated steps by using parameter lists. The advantage is a simplified development environment

Updated Tools for the DCE APIs

The following APIs have been updated for the Consolidated DCE Application Development Tools delivery.

- There are no APIs that have been updated for this delivery.

The DCECOE library consists of the routines listed below and described in separate man pages.

Server-side routines:

- COEDCEinitialize_server() - Initializes a DCE server.
- COEDCEsignal_server() - Signal a server to enter listen loop.
- COEDCEcreate_acl() - Creates an access control list (ACL).
- COEDCEis_auth() - Makes an authorization decision.
- COEDCEfinalize_server() - Terminate server resources.

Client-side routines:

- COEDCEinitialize_client() - Initializes a DCE client
- COEDCElocate_server() - Locates a server
- COEDCEgetvector() - Retrieves a binding vector
- COEDCEinquire_server() - Gets information about a server
- COEDCEstart_server() - Prepare a handle for communications with a server
- COEDCEfree_servers() - Frees a server
- COEDCEfinalize_client() - Frees allocated resources

2. Referenced Documents

The following documents are referenced in this Version Description Document:

- OSFâ DCE Application Development Guide - Introduction and Style Guide
- OSFâ DCE Application Development Guide - Core Components
- OSFâ DCE Application Development Reference Volume 1
- OSFâ DCE Application Development Reference Volume 2
- DII DCE Supplemental Consolidated DCE Application Development Tools Programmer's Guide v1.0.0.0

3. Version Description

3.1 Inventory of materials Received

- Magnetic Media: Two 8mm tapes consisting of a relative tar of the DCE APIs Version 1.0.1.0/Solaris 2.4
 - Transarc DCE 1.1 Application Development Tools v1.0.0.5
 - Simplified DCE APIs v 1.0.1.0
- *DII DCE Supplemental Consolidated DCE Application Development Tools Programmer's Guide Version 1.0.0.0/Solaris*
- Version Description Document Defense Information Infrastructure (DII) Common Operating Environment (COE) *Consolidated Application Development Tools Version 1.0.0.0*, December 20, 1996.
- *Installation Instructions for the Consolidated DCE Application Development Tools* (Solaris) Version 1.0.0.0, December 20, 1996

3.2 Software Changes

Reference Appendix A for a list of the DCE API software changes.

4. Installation Instructions

Reference the *Installation Instructions for the Consolidated DCE Application Development Tools for Solaris 2.4* for instructions on installing the DCE APIs.

5. Known Problems and Errors

- The client side routines are not thread safe.
- The API prefix should be DCECOE instead of COEDCE for consistency.

6. Release Notes

6.1 Server-side routines

COEDCEinitialize_server()

1. There are no open issues against this API.

COEDCEsignal_server

1. There are no open issues against this API.

COEDCEcreate_acl()

1. There are no open issues against this API.

COEDCEis_auth()

1. There are no open issues against this API.

COEDCEfinalize_server()

1. There are no open issues against this API.

6.2 Client-side routines:

COEDCEinitialize_client()

1. There are no open issues against this API.

COEDCElocate_server()

1. There are no open issues against this API.

COEDCEgetvector()

1. There are no open issues against this API.

COEDCEinquire_server()

1. There are no open issues against this API.

COEDCEstart_server()

1. There are no open issues against this API.

COEDCEfree_servers()

1. There are no open issues against this API.

COEDCEfinalize_client()

1. There are no open issues against this API.

Appendix A

Software Changes

This release is the consolidation of Transarc DCE 1.1 Application Development Toolkit and the Simplified DCE API. There are currently no GSPRs open for this delivery.